

CLAIMS

1. A method for testing a digital content player; the method comprising the steps of playing digital content using the digital content player; the digital content comprising identification data capable of being output by the digital content player to produce an identifiable output from the player; comparing an identifiable output corresponding to the digital content with the digital content or with a current location within the digital content to determine if the identifiable output of the player corresponds to an anticipated or expected position within the digital content; and means for assessing the player using that determination.
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2. A method as claimed in claim 1, in which the step of comparing comprises the step of sampling an output signal of the player and extracting the identifiable output from the sampled output signal.
3. A method as claimed in any preceding claim in which the step of comparing comprises comparing the identifiable output with identification data associated with the digital content.
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4. A method for testing a number of media players; the method comprising the steps of playing the same digital content using the media players; the digital content comprising identification data capable of causing the media players to produce respective identifiable outputs; comparing the identifiable outputs with anticipated or expected positions of the media players within the digital content; and assessing the media players in response to that comparison.
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5. A method for testing a player; the method comprising the steps of playing digital content using the player and determining whether or not the current position of the player within the digital content corresponds to an expected or anticipated position of the player within the digital content.
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6. A method of testing a player using a test standard in the form video image data; the method comprising the steps of playing the video image data and

determining whether or not the output of the player is as anticipated or expected.

7. A method of testing a player using a test standard in the form video image data; the method comprising the steps of playing the video image data using at least one player, and preferably a plurality of players, and determining whether or not the output of the player is as anticipated or expected by comparing the processing of that video image data by the at least one player, and preferably the plurality of players, with the processing of that video image data using another player.

10 8. A method of testing a player for digital content; the method comprising the steps of at least predicting, preferably processing or noting, the response of a first player to a first, respective, copy of digital content and processing the response of a second player to a second, respective, copy of the digital content; and judging whether or not the second player is acceptable.

15 9. A method of testing a player for digital content; the method comprising the steps of at least predicting, preferably processing or noting, the response of a first player to a first, respective, copy of digital content and processing the response of a second player to a second, respective, copy of the digital content; and comparing at least the predicted response of the first player to the digital content with the noted response of the second player to the digital content and providing an indication of the result of the comparison.

20 10. A method of authoring digital content comprising the steps of monitoring a response of a first player to processing the digital content, the digital content having verified as complying with an associated standard, and reauthoring digital content in response to the monitoring.

25 11. A method as claimed in claim 10 in which the step of monitoring comprises the step of identifying unpredictable navigational behaviour of the player in response to a corresponding aspect of the digital content, and in which the step of reauthoring the content in response to the monitoring comprises the step of

at least of editing or deleting the corresponding aspect of the digital content to at least reduce, and preferably remove, the unpredictable navigational behaviour.

12. A method as claimed in either of claims 10 and 11 further comprising the step 5 of ensuring the reauthored digital content complies with an associated technical standard.

13. A method as claimed in any of claims 10 to 12, in which the step of monitoring comprises the steps of playing the digital content using a reference 10 player that has been certified as being compliant with a respective technical standard; playing the digital content using the first player and comparing the navigational responses of the reference player and the first player to the digital content to identify a difference between the responses.

14. A method as claimed in any of claims 10 to 13, in which at least one of the first digital content and the authored digital content comprises DVD video 15 image data, including both presentation and navigation data.

15. A method of testing a first player; the method comprising the steps of processing digital content; certified as complying with an associated technical standard; processing the digital content using a reference player and comparing the respective navigational responses of the first and reference 20 players.

16. Using a DVD video image, certified as complying with a technical specification, as a test standard for assessing performance of a DVD player.

17. A method substantially as described herein with reference to and/or as illustrated in figures 2 to 10 of the accompanying drawings.

25 18. A method of testing a plurality of digital content players; the digital content having been verified as complying with an associated technical standard; the method comprising the steps of: issuing control commands to cause the plurality of player to processes data associated with, preferably selectable,

navigation paths of the digital content; monitoring the responses of the plurality of players to the control commands to process the data associated with the navigation paths; and determining whether or not the plurality of players processed data associated with the selectable navigation paths through

5 the digital content.

19. A method of testing as claimed in claim 18 further comprising the steps of analysing data associated with selectable navigation paths of the digital content and selecting the control commands in response to the step of analysing.

10 20. A method as claimed in claim 19 in which the step of determining comprises comparing data associated with the responses of the plurality of players to the control commands with the analysis of the data associated with the selectable navigation paths to determine a degree of correlation between the data associated with the responses and the data associated with the selectable

15 navigation paths.

21. A method as claimed in either of claims 19 and 20 in which the step of analysing comprises the steps of identifying a plurality of menu choices; selecting one menu choice from the plurality of menu choices; and selecting the control command according to the selected menu choice.

20 22. A method as claimed in claim 21 in which the step of selecting one menu choice comprises the step of determining the respective number of times that the plurality of menu choices have been invoked and selecting the one menu choice according to the respective number of invocations.

23. A method as claimed in any of claims 19 to 22 in which the step of analysing data associated with selectable navigation paths comprises the steps of identifying the data as being associated with a predetermined function; the predetermined function governing an onward navigation path selectable from a plurality of possible onward navigation paths; and in which the step of determining whether or not the plurality of players processed the data

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associated with the selectable navigation paths through the digital content comprises the step of identifying the onward navigation path from the data processed by the plurality of players.

24. A method as claimed in claim 23 in which the step of analysing data
5 associated with selectable navigation paths comprising the step of identifying the data as being associated with a predetermined function comprises the step of generating data associated with each possible onward navigation path; and in which the step of identifying the onward navigation path comprises the step of discarding the generated data associated with selectable possible
10 onward navigation paths.
25. A method as claimed in any of claims 18 to 24 further comprising the step of creating, via a user interface, a plurality of control commands to be issued to the plurality of players.
26. A method as claimed in claim 25 further comprising the step of storing the
15 plurality of created control commands and in which the step of issuing control commands comprises the steps of retrieving the created control commands and issuing the retrieved control commands to the plurality of players.
27. A method as claimed in any of claims 18 to 26 in which the step of determining whether or not the plurality of players processed data associated
20 with the selectable navigation paths through the digital content comprises the step of processing the digital content using a reference player and comparing data associated with processing the digital content using the reference player with data associated with processing the digital content using the plurality of players.
- 25 28. A method as claimed in any of claims 18 to 27 further comprising the step of extracting identification data associated with the digital content; extracting output identification data associated with the processing of the digital content by the plurality of players; correlating the identification data and the output identification data and in which the step of determining whether or not the

plurality of players processed data associated with the selectable navigation paths through the digital content is responsive to the step of correlating the identification data and the output identification data.

29. A method as claimed in any of claims 18 to 28 in which the digital content has
5 been verified as complying with an associated technical standard.
30. A method as claimed in claim 29 further comprising the step verifying that the digital content complies with the associated technical standard.
31. A method as claimed in either of claims 29 and 30 in which the digital content complies with at least one of the DVD specifications.
- 10 32. A method of authoring digital content comprising the steps of testing a plurality of digital content players using a method as claimed in any preceding claim; and reauthoring digital content in response to said testing.
- 15 33. A method of authoring digital content comprising the steps of monitoring respective responses of a plurality of players to processing the digital content, the digital content having verified as complying with an associated standard, and reauthoring digital content in response to the monitoring; wherein the step of monitoring comprises traversing selectable navigation paths through the digital content and comparing the traversals with anticipated traversals through the digital content.
- 20 34. A system comprising means to implement a method as claimed in any preceding claim.
35. A computer program comprising program code means to implement a method or system as claimed in any preceding claim.
36. Computer readable storage storing a computer program as claimed in claim
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